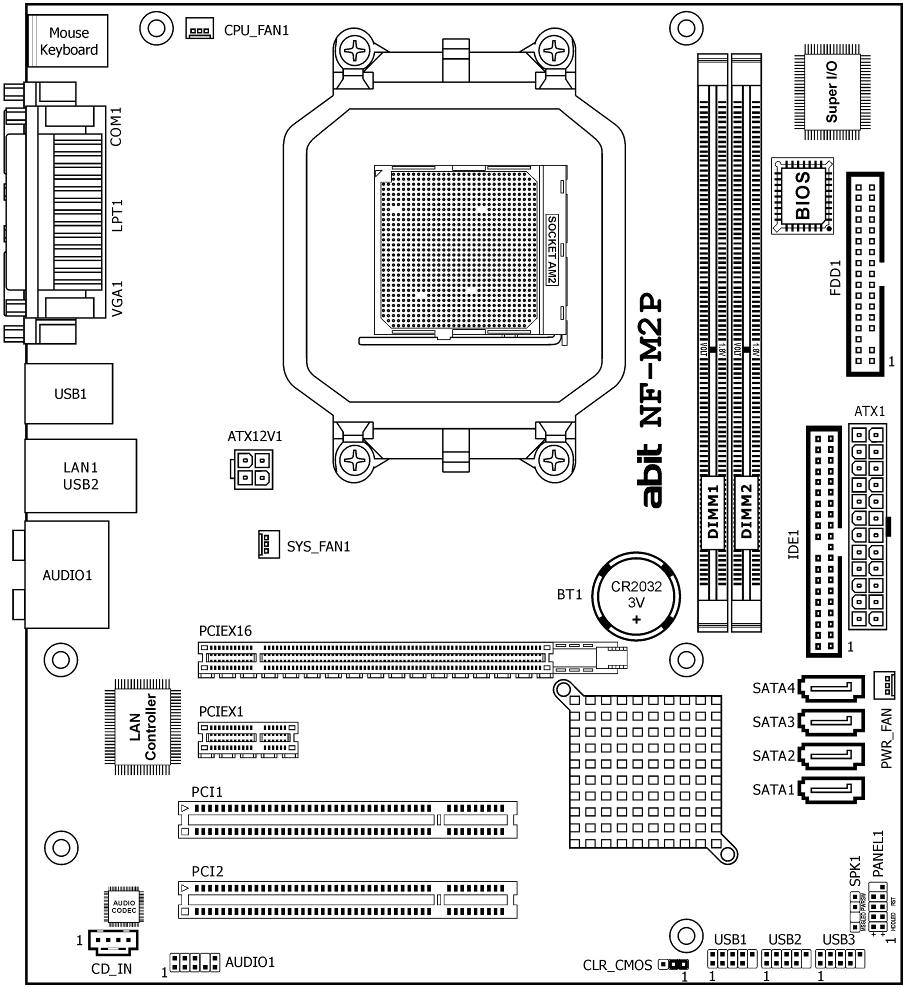


NF-M2P

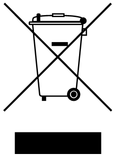
NF-M2S

NF-M2SV

Motherboard
AMD Socket AM2

Installation Guide

Copyright and Warranty Notice



The Following Information is Only for EU-member States:

Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE): The use of the symbol indicates that this product may not be treated as household waste. By Ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be cause by inappropriate waste handling of this product. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

Contents


MEMO

1. Hardware Setup

1.1 Specifications

1.1.1 NF-M2P

CPU

- Socket AM2 processor with 2000MT/s system bus
- Supports AMD Cool 'n' Quiet Technology

Chipset

- NVIDIA GeForce6100 + 430

Memory

- 2x 240-pin DIMM slots support up to 2GB
- Supports Dual Channel DDR2 800/667/533 Un-buffered ECC/Non-ECC memory

Graphics

- Integrated NVIDIA GeForce6100 Graphics

LAN

- Onboard Gigabit LAN

Audio

- Onboard 7.1-Channel HD Audio CODEC

Serial ATA

- 4x SATA 3Gb/s support SATA RAID 0, 1, 10, 5, JBOD

Expansion Slots

- 1x PCI-E X16 slot
- 1x PCI-E X1 slot
- 2x PCI slots

Internal I/O Connectors

- 1x Floppy port
- 1x ATA 133 IDE connector
- 3x USB 2.0 headers
- 4x SATA 3Gb/s connectors
- 1x FP-Audio header
- 1x CD-In connector

Rear Panel I/O

- 1x PS/2 Keyboard connector
- 1x PS/2 Mouse connector
- 1x COM port
- 1x LPT port
- 1x VGA connector
- 4x USB 2.0 connectors
- 1x RJ-45 LAN connector
- 1x 7.1-Channel Audio Connector

RoHS

- 100% Lead-free process and RoHS compliant

Miscellaneous

- Micro ATX form factor (244mm x 220mm)
- Vista HW Ready

※ **Specifications and information contained herein are subject to change without notice.**

1.1.2 NF-M2S

CPU
- Socket AM2 processor with 2000MT/s system bus
- Supports AMD Cool 'n' Quiet Technology

Chipset
- NVIDIA GeForce6100 + 405

Memory
- 2x 240-pin DIMM slots support up to 2GB
- Supports Dual Channel DDR2 800/667/533 Un-buffered ECC/Non-ECC memory

Graphics
- Integrated NVIDIA GeForce6100 Graphics

LAN
- Onboard Gigabit LAN

Audio
- Onboard 7.1-Channel HD Audio CODEC

Serial ATA
- 2x SATA 3Gb/s support SATA RAID 0, 1

Expansion Slots
- 1x PCI-E X16 slot
- 1x PCI-E X1 slot
- 2x PCI slots

Internal I/O Connectors
- 1x Floppy port
- 1x ATA 133 IDE connector
- 2x USB 2.0 headers
- 2x SATA 3Gb/s connectors
- 1x FP-Audio header
- 1x CD-In connector

Rear Panel I/O
- 1x PS/2 Keyboard connector
- 1x PS/2 Mouse connector
- 1x COM port
- 1x LPT port
- 1x VGA connector
- 4x USB 2.0 connectors
- 1x RJ-45 LAN connector
- 1x 7.1-Channel Audio Connector

RoHS
- 100% Lead-free process and RoHS compliant

Miscellaneous
- Micro ATX form factor (244mm x 220mm)
- Vista HW Ready

※ **Specifications and information contained herein are subject to change without notice.**

1.1.3 NF-M2SV

CPU

- Socket AM2 processor with 2000MT/s system bus
- Supports AMD Cool 'n' Quiet Technology

Chipset

- NVIDIA GeForce6100 + 405

Memory

- 2x 240-pin DIMM slots support up to 2GB
- Supports Dual Channel DDR2 800/667/533 Un-buffered ECC/Non-ECC memory

Graphics

- Integrated NVIDIA GeForce6100 Graphics

LAN

- Onboard 10/100 LAN

Audio

- Onboard 5.1-Channel HD Audio CODEC

Serial ATA

- 2x SATA 3Gb/s support SATA RAID 0, 1

Expansion Slots

- 1x PCI-E X16 slot
- 1x PCI-E X1 slot
- 2x PCI slots

Internal I/O Connectors

- 1x Floppy port
- 1x ATA 133 IDE connector
- 2x USB 2.0 headers
- 2x SATA 3Gb/s connectors
- 1x FP-Audio header
- 1x CD-In connector

Rear Panel I/O

- 1x PS/2 Keyboard connector
- 1x PS/2 Mouse connector
- 1x COM port
- 1x LPT port
- 1x VGA connector
- 4x USB 2.0 connectors
- 1x RJ-45 LAN connector
- 1x 5.1-Channel Audio Connector

RoHS

- 100% Lead-free process and RoHS compliant

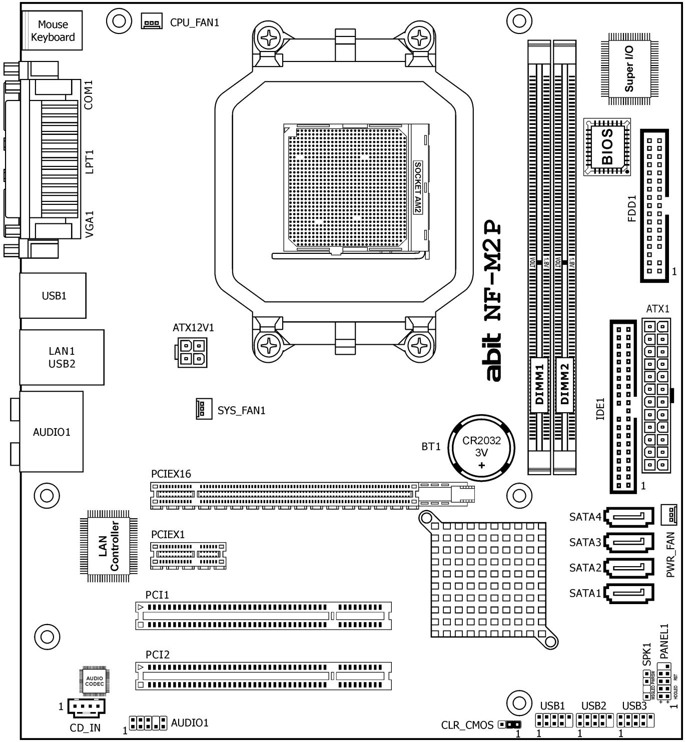
Miscellaneous

- Micro ATX form factor (244mm x 220mm)
- Vista HW Ready

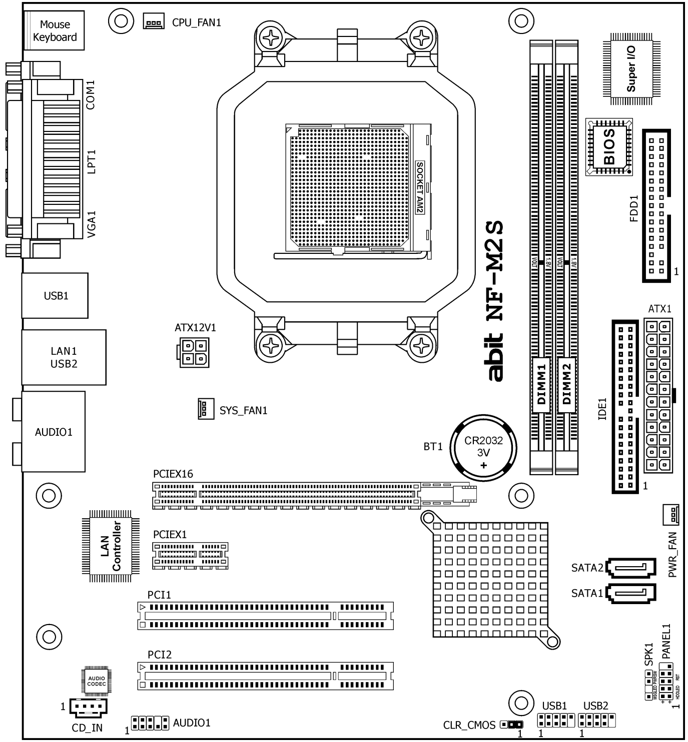
※ **Specifications and information contained herein are subject to change without notice.**

1.2 Motherboard Layout

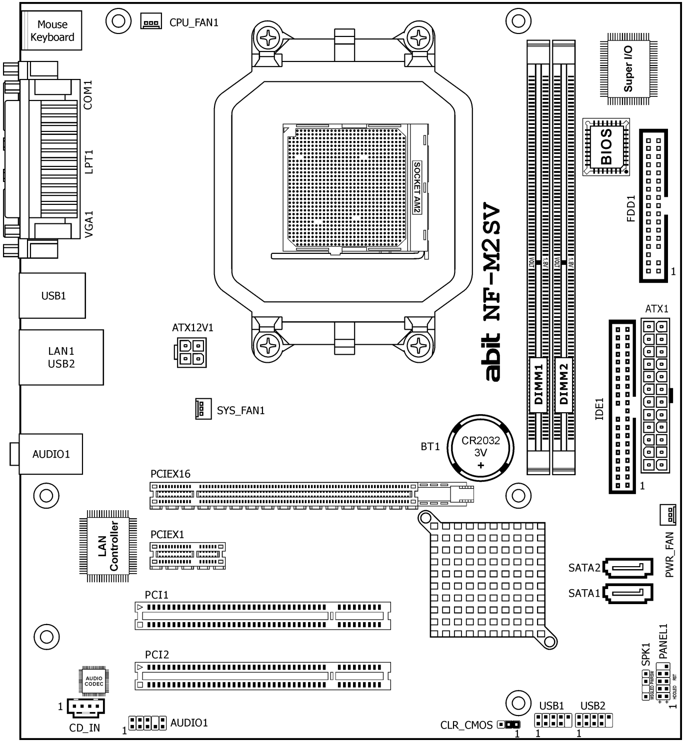
1.2.1 NF-M2P



1.2.2 NF-M2S



1.2.3 NF-M2SV

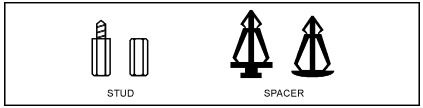


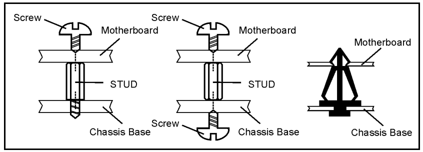
※ **The motherboard and its component layouts illustrated in the following chapter of this manual were mainly based on model "NF-M2P", unless specifically stated.**

1.3 Choosing a Computer Chassis

- Choose a chassis big enough to install this motherboard.
- As some features for this motherboard are implemented by cabling connectors on the motherboard to indicators and switches or buttons on the chassis, make sure your chassis supports all the features required.
- If there is a possibility of adopting some more hard drives, make sure your chassis has sufficient power and space for them.
- Most chassis have alternatives for I/O shield located at the rear panel. Make sure the I/O shield of the chassis matches the I/O port configuration of this motherboard. You can find an I/O shield specifically designed for this motherboard in its package.

1.4 Installing Motherboard





Most computer chassis have a base with many mounting holes to allow the motherboard to be securely attached, and at the same time, prevent the system from short circuits. There are two ways to attach the motherboard to the chassis base: (1) with studs, or (2) with spacers.

Basically, the best way to attach the board is with studs. Only if you are unable to do this should you attach the board with spacers. Line up the holes on the board with the mounting holes on the chassis. If the holes line up and there are screw holes, you can attach the board with studs. If the holes line up and there are only slots, you can only attach with spacers. Take the tip of the spacers and insert them into the slots. After doing this to all the slots, you can slide the board into position aligned

with slots. After the board has been positioned, check to make sure everything is OK before putting the chassis back on.

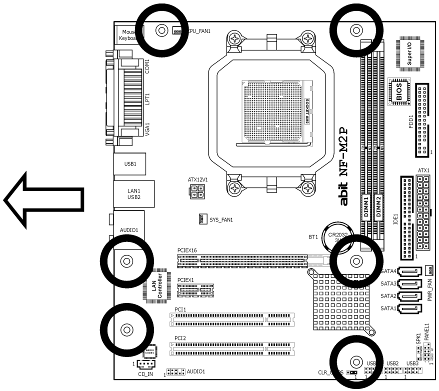
※ **Always power off the computer and unplug the AC power cord before adding or removing any peripheral or component. Failing to so may cause severe damage to your motherboard and/or peripherals. Plug in the AC power cord only after you have carefully checked everything.**

To install this motherboard:

1. Locate all the screw holes on the motherboard and the chassis base.
2. Place all the studs or spacers needed on the chassis base and have them tightened.
3. Face the motherboard's I/O ports toward the chassis's rear panel.
4. Line up all the motherboard's screw holes with those studs or spacers on the chassis.
5. Install the motherboard with screws and have them tightened.

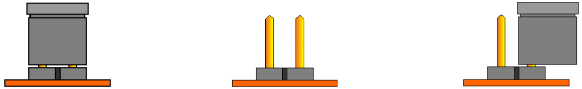
※ **To prevent shorting the PCB circuit, please REMOVE the metal studs or spacers if they are already fastened on the chassis base and are without mounting-holes on the motherboard to align with.**

This side faces the chassis's rear panel.



1.5 Checking Jumper Settings

For a 2-pin jumper, plug the jumper cap on both pins will make it CLOSE (SHORT). Remove the jumper cap, or plug it on either pin (reserved for future use) will leave it at OPEN position.



SHORT OPEN OPEN

For a 3-pin jumper, pin 1~2 or pin 2~3 can be shorted by plugging the jumper cap in.

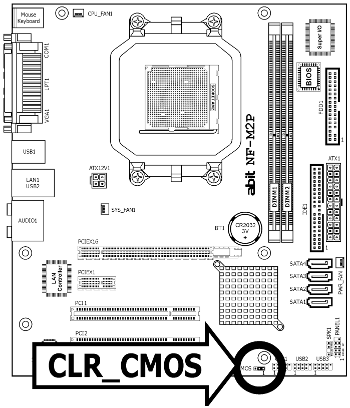


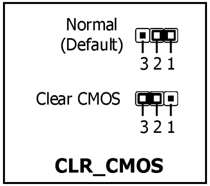
Pin 1~2 SHORT Pin 2~3 SHORT

1.5.1 CMOS Memory Clearing Header and Backup Battery

The time to clear the CMOS memory occurs when (a) the CMOS data becomes corrupted, (b) you forgot the supervisor or user password preset in the BIOS menu, (c) you are unable to boot-up the system because the CPU ratio/clock was incorrectly set in the BIOS menu, or (d) whenever there is modification on the CPU or memory modules.

This header uses a jumper cap to clear the CMOS memory and have it reconfigured to the default values stored in BIOS.





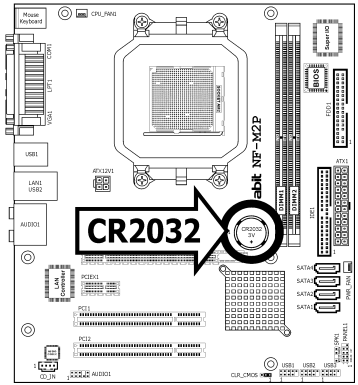
- **Pins 1 and 2 shorted (Default):** Normal operation.
- **Pins 2 and 3 shorted:** Clear CMOS memory.

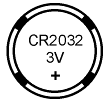
To clear the CMOS memory and load in the default values:

1. Power off the system.
2. Set pin 2 and pin 3 shorted by the jumper cap. Wait for a few seconds. Set the jumper cap back to its default settings --- pin 1 and pin 2 shorted.
3. Power on the system.
4. For incorrect CPU ratio/clock settings in the BIOS, press <Del> key to enter the BIOS setup menu right after powering on system.
5. Set the CPU operating speed back to its default or an appropriate value.
6. Save and exit the BIOS setup menu.

CMOS Backup Battery:

An onboard battery saves the CMOS memory to keep the BIOS information stays on even after disconnected your system with power source. Nevertheless, this backup battery exhausts after some five years. Once the error message like "**CMOS BATTERY HAS FAILED**" or "**CMOS checksum error**" displays on monitor, this backup battery is no longer functional and has to be renewed.





To renew the backup battery:

1. Power off the system and disconnect with AC power source.
2. Remove the exhausted battery.
3. Insert a new CR2032 or equivalent battery. Pay attention to its polarity. The "+" side is its positive polarity.
4. Connect AC power source and power on the system.
5. Enter the BIOS setup menu. Reconfigure the setup parameters if necessary.

CAUTION:

※ **Danger of explosion may arise if the battery is incorrectly renewed.**

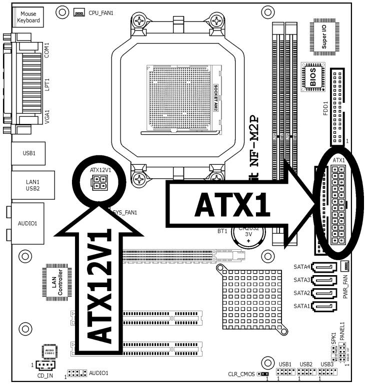
※ **Renew only with the same or equivalent type recommended by the battery manufacturer.**

※ **Dispose of used batteries according to the battery manufacturer's instructions.**

1.6 Connecting Chassis Components

1.6.1 ATX Power Connectors

These connectors provide the connection from an ATX power supply. As the plugs from the power supply fit in only one orientation, find the correct one and push firmly down into these connectors.



ATX 24-Pin Power Connector:

The power supply with 20-pin or 24-pin cables can both be connected to this 24-pin connector. Connect from pin-1 for either type. However, a 20-pin power supply may cause the system unstable or even unbootable for the sake of insufficient electricity. A minimum power of 300W or higher is recommended.

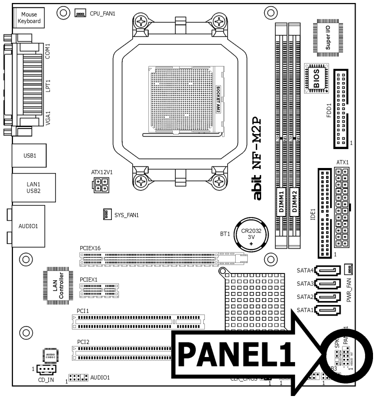
ATX 12V 4-Pin Power Connector:

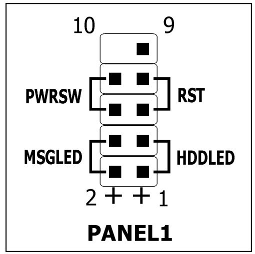
This connector supplies power to CPU. The system will not start without connecting power to this one.

1.6.2 Front Panel Switches and Indicators Headers

This header is used for connecting switches and LED indicators on the chassis front panel.

Watch the power LED pin position and orientation. The mark "+" align to the pin in the figure below stands for positive polarity for the LED connection. Please pay attention when connecting these headers. A wrong orientation will only result in the LED not lighting, but a wrong connection of the switches could cause system malfunction.





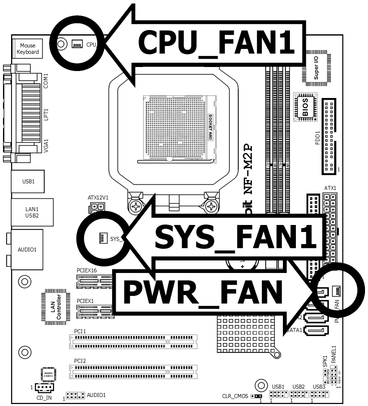
Pin	Definition	Pin	Definition
1	HD LED +	2	Message LED +
3	HD LED -	4	Message LED -
5	RESET	6	Power Switch
7	RESET	8	Power Switch
9	Reserved		

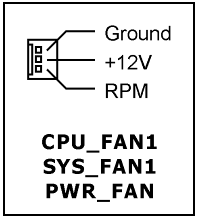
1.6.3 FAN Power Connectors

These connectors each provide power to the cooling fans installed in your system.

- **CPU_FAN1:** CPU Fan Power Connector
- **SYS_FAN1:** System Fan Power Connector
- **PWR_FAN:** Auxiliary Fan Power Connector

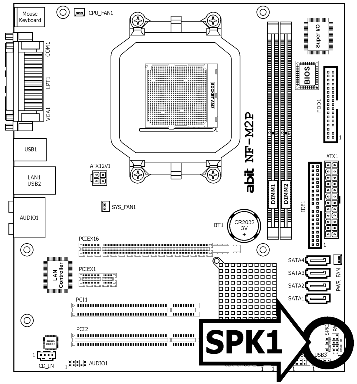
※ **These fan connectors are not jumpers. DO NOT place jumper caps on these connectors.**

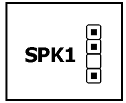




1.6.4 Chassis Speaker Connector

This header provides the connection to chassis speaker.





1.7 Installing Hardware

※ **DO NOT scratch the motherboard when installing hardware. An accidentally scratch of a tiny surface-mount component may seriously damage the motherboard.**

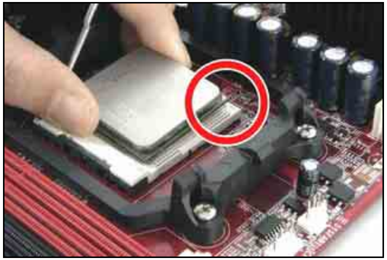
1.7.1 CPU Socket AM2

※ **DO NOT touch or bend the delicate pins on the CPU whenever you are holding it.**

The installation procedures vary with different types of CPU fan-and-heatsink assembly. The one shown here is served for **DEMO** only. For detailed information on how to install the one you bought, refer to its installation guidelines.

1. Pull out the socket lever away from the socket and fully lift it up over 90-degree angle.

   Locate and align the triangle mark with both the CPU and the socket body. Vertically place the CPU with its pin-side down into the socket.

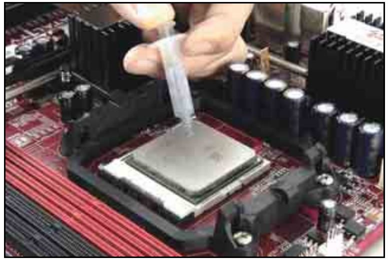


   Be careful to insert the CPU into the socket. The CPU only fits in one orientation with the socket. DO NOT force the CPU into the socket.

2. After placing the CPU into position, push the socket lever down into its locked position to secure the CPU. The lever clicks when it's locked into position.



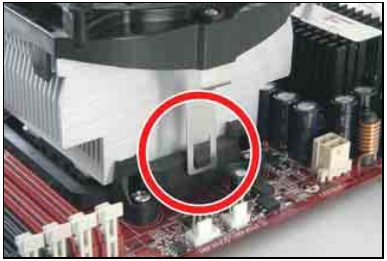
3. The heatsink for CPU may have thermal interface material attached to its bottom. If not, applying a few squeeze of thermal paste to the CPU die will help to increase the contact.



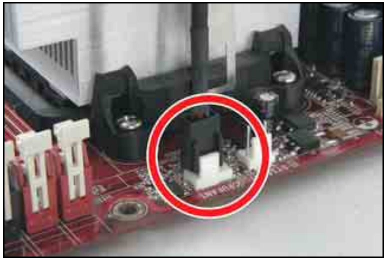
4. Place the heatsink and fan assembly onto the retention frame. Match the heatsink clip with the socket mounting-lug. Hook the spring clip to the mounting-lug.



5. On the other side, push the retention clip straight down to lock into the plastic lug on the retention frame.



6. Connect the CPU cooling fan power cable to the "CPU_FAN" connector on this motherboard.

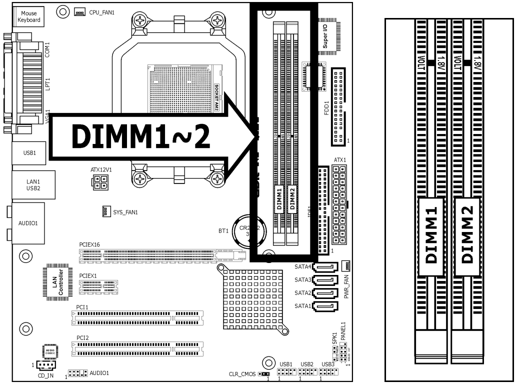


※ **The "CPU_FAN" connector can be connected either with a 3-Pin or 4-Pin CPU cooling fan. For a 3-Pin connection, there will be no speed control available in the BIOS setup menu; the CPU fan will run at full speed.**
Also, please watch out for the orientation when inserting 3-Pin plug into this 4-Pin fan connector.

※ **The motherboard in this illustration is served for DEMO only, may not be the same type or model as the one described in this user's manual.**

※ **A higher fan speed will be helpful for better airflow and heat-dissipation. Nevertheless, stay alert to not touch any heatsink since a high temperature generated by the working system is still possible.**

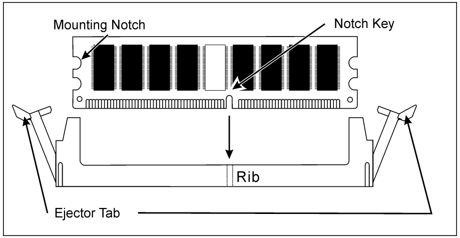
1.7.2 DDR2 Memory Slots



- To reach the optimum performance in dual-channel configurations, install identical DDR2 DIMM pairs for each channel.
- Install DIMMs with the same CAS latency. To reach the optimum compatibility, obtain memory modules from the same vendor.

※ **Usually there is no hardware or BIOS setup required after adding or removing memory modules, but you will have to clear the CMOS memory first if any memory module related problem occurs.**

To install system memory:

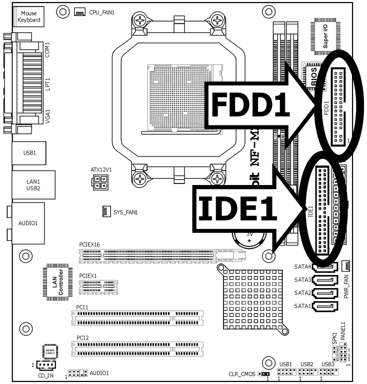


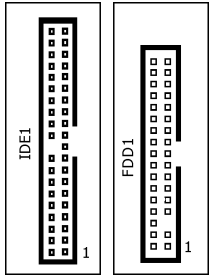
1. Power off the computer and unplug the AC power cord before installing or removing memory modules.
2. Locate the DIMM slot on the board.
3. Hold two edges of the DIMM module carefully, keep away from touching its connectors.
4. Align the notch key on the module with the rib on the slot.
5. Firmly press the module into the slots until the ejector tabs at both sides of the slot automatically snap into the mounting notch. Do not force the DIMM module in with extra force as the DIMM module only fits in one direction.
6. To remove the DIMM modules, push the two ejector tabs on the slot outward simultaneously, and then pull out the DIMM module.

※ **Static electricity can damage the electronic components of the computer or optional boards. Before starting these procedures, ensure that you are discharged of static electricity by touching a grounded metal object briefly.**

1.8 Connecting Peripheral Devices

1.8.1 Floppy and IDE Disk Drive Connectors



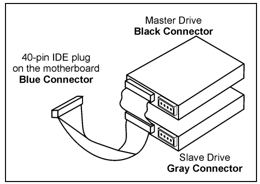


Connect the single end at the longer length of ribbon cable to the FDD on the board, the two connectors on the other end to the floppy disk drives connector. Generally you need only one floppy disk drive in your system.

※ **The red line on the ribbon cable must be aligned with pin-1 on both the FDD port and the floppy connector.**

Connect the single end (blue connector) at the longer length of ribbon cable to the IDE port of this board, the other two ends (gray and black connector) at the shorter length of the ribbon cable to the connectors of your hard drives.

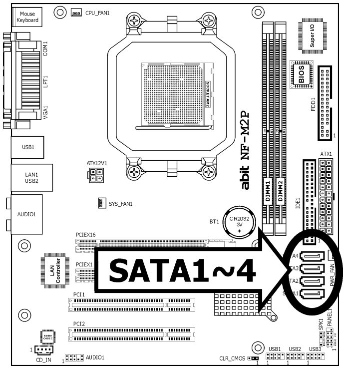
※ **Make sure to configure the "Master" and "Slave" relation before connecting two drives by one single ribbon cable. The red line on the ribbon cable must be aligned with pin-1 on both the IDE port and the hard-drive connector.**

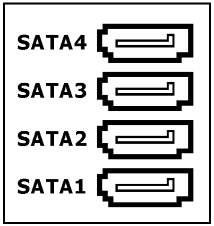


1.8.2 Serial ATA Connectors

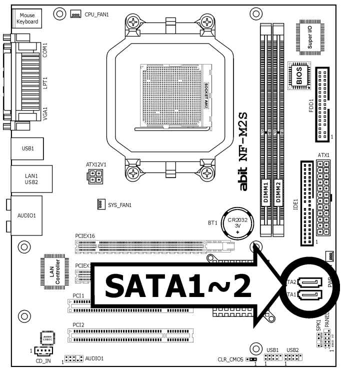
Each SATA connector serves as one single channel to connect one SATA device by SATA cable.

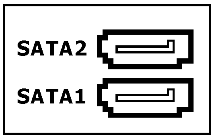
NF-M2P:





NF-M2S/NF-M2SV:

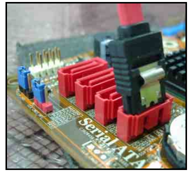




To connect SATA device:

1. Attach either end of the signal cable to the SATA connector on motherboard. Attach the other end to the SATA device.
2. Attach the SATA power cable to the SATA device and connect the other end from the power supply.

※ **The motherboard in this photo is served for DEMO only, and may not be the same type or model as the one described in this manual.**

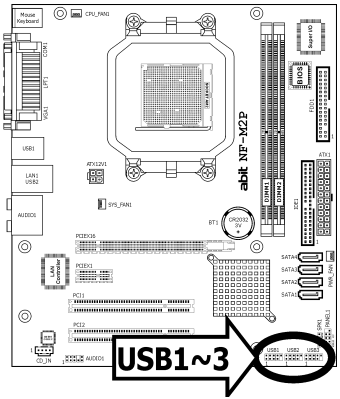


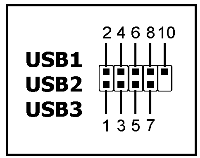


1.8.3 Additional USB 2.0 Port Headers

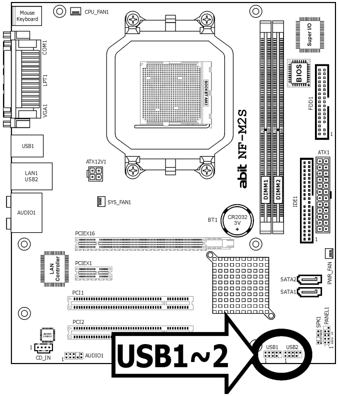
Each header supports 2x additional USB 2.0 ports by connecting bracket or cable to the rear I/O panel or the front-mounted USB ports of your chassis.

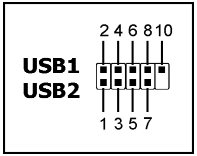
NF-M2P:





NF-M2S/NF-M2SV:



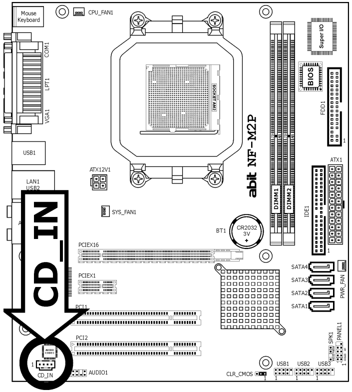


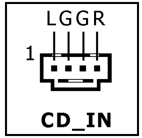
Pin	Pin Assignment	Pin	Pin Assignment
1	VCC	2	VCC
3	Data0 -	4	Data1 -
5	Data0 +	6	Data1 +
7	Ground	8	Ground
		10	NC

※ **Make sure the connecting cable bears the same pin assignment.**

1.8.4 Internal Audio Connectors

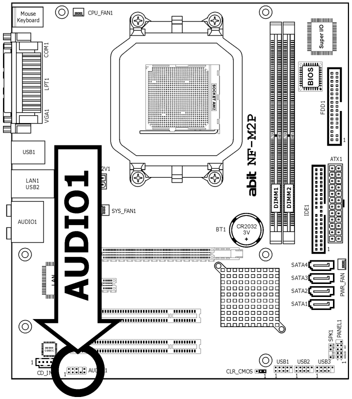
This connector connects to the audio output of internal CD-ROM drive or add-on card.

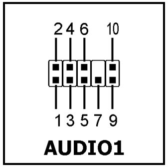




1.8.5 Front Panel Audio Connection Header

This header provides the connection to audio connector at front panel.





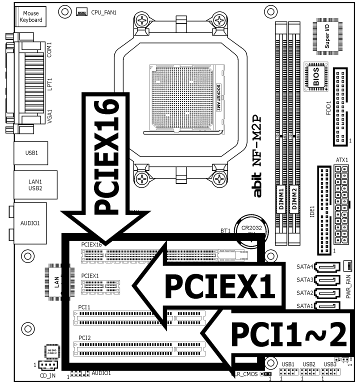
Pin	Signal Name	Function
1	AUD_MIC	Front Panel Microphone input signal
2	AUD_GND	Ground used by Analog Audio Circuits
3	AUD_MIC_BIAS	Microphone Power
4	AUD_VCC Filtered	+5V used by Analog Audio Circuits
5	AUD_F_R	Right Channel audio signal to Front Panel
6	AUD_RET_R	Right Channel Audio signal to Return from Front Panel
7	REVD	Reserved
8	Key	No Pin
9	AUD_F_L	Left Channel Audio signal to Front Panel
10	AUD_RET_L	Left Channel Audio signal to Return from Front Panel

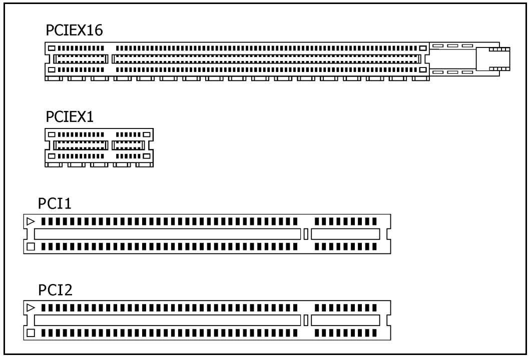
1.8.6 PCI and PCI Express X16, X1 Slots

Install PCI Express X16 graphics card into slot "PCIEX16".

Install PCI Express X1 card into slot "PCIEX1".

Install PCI cards into slots "PCI1" and/or "PCI2".

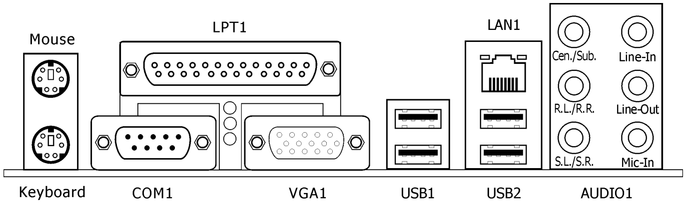




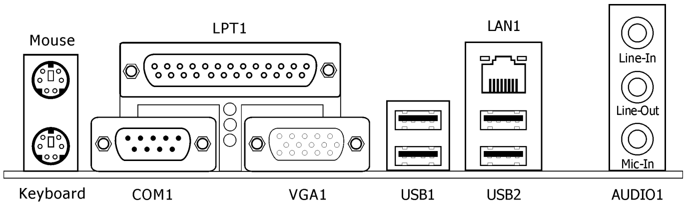
1.9 Connecting Rear Panel I/O Devices

The rear I/O part of this motherboard provides the following I/O ports:

NF-M2P/NF-M2S:



NF-M2SV:



- **Mouse:** Connects to PS/2 mouse.
- **Keyboard:** Connects to PS/2 keyboard.
- **LPT1:** Connects to printer or other devices that support this communication protocol.
- **COM1:** Connects to external modem, mouse or other devices that support this communication protocol.
- **VGA1:** Connects to monitor input.
- **USB1/USB2:** Connects to USB devices such as scanner, digital speakers, monitor, mouse, keyboard, hub, digital camera, joystick etc.
- **LAN1:** Connects to Local Area Network.
- **AUDIO1:** *(For model NF-M2P/NF-M2S)*
  Cen./Sub. (Center / Subwoofer): Connects to the center and subwoofer channel.
  R.L./R.R. (Rear Left / Rear Right): Connects to the rear left and rear right channel.
  S.L./S.R. (Surround Left / Surround Right): Connects to the surround left and surround right channel.
  Line-In: Connects to the line out from external audio sources.
  Line-Out: Connects to the front left and front right channel.
  Mic-In: Connects to the plug from external microphone.
- **AUDIO1:** *(For model NF-M2SV)*
  Line-In: Connects to the line out from external audio sources.
  Line-Out: Connects to the front left and front right channel.
  Mic-In: Connects to the plug from external microphone.

2. BIOS Setup

This motherboard provides a programmable EEPROM so that you can update the BIOS utility. The BIOS (Basic Input/Output System) is a program that deals with the basic level of communication between processor and peripherals. Use the BIOS Setup program only when installing motherboard, reconfiguring system, or prompted to “Run Setup”.

After powering up the system, the BIOS message appears on the screen, the memory count begins, and then the following message appears on the screen:

PRESS DEL TO ENTER SETUP

If this message disappears before you respond, restart the system by pressing <Ctrl> + <Alt> + <Del> keys, or by pressing the Reset button on computer chassis. Only when these two methods fail should you restart the system by powering it off and then back on.

After pressing <Del> key, the main menu screen appears.

```
Phoenix - AwardBIOS CMOS Setup Utility

► Standard CMOS Features          Load Fail-Safe Defaults
► Advanced Features               Load Optimized Defaults
► Advanced Chipset Features       Set Supervisor Password
► Integrated Peripherals          Set User Password
► Power Management Setup          Save & Exit Setup
► PnP/PCI Configurations          Exit Without Saving
► PC Health Status

Esc: Quit                         ↑↓→←   : Select Item
F10: Save & Exit Setup

Time, Date, Hard Disk Type…
```

※ **In order to increase system stability and performance, our engineering staff is constantly improving the BIOS menu. The BIOS setup screens and descriptions illustrated in this manual are for your reference only, and may not completely match with what you see on your screen.**

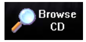
※ **Do not change the BIOS parameters unless you fully understand its function.**

3. Driver & Utility

The "Driver & Utility CD" that came packed with this motherboard contains drivers, utilities and software applications required for its basic and advanced features.

Place the "Driver & Utility CD" into the CD-ROM drive in your system. The following installation auto-run screen appears. If not, browse the root directory of the CD-ROM via the File Manager, and double click the "AUTORUN" file.



- [**Drivers**]: Click to enter the driver installation menu.
- [**Manual**]: Click to enter the user's manual menu.
- [**Utility**]: Click to enter the utilities installation menu.
- [**abit Utility**]: Click to enter the installation menu of utilities exclusively developed by **abit**.
- [

Browse CD]: Click to browse the contents of this "Driver & Utility CD".
- [

Close]: Click to exit this installation menu.

4. Appendix

4.1 規格（繁體中文）

4.1.1 NF-M2P

處理器

- 支援具備 2000MT/s 系統匯流排的 Socket AM2 處理器
- 支援 AMD Cool 'n' Quiet 技術

晶片組

- NVIDIA GeForce6100 + 430

記憶體

- 2 條 240 針腳 DIMM 插槽，支援最大 2GB 記憶體容量
- 支援雙通道 DDR2 800/667/533 無緩衝 ECC/非 ECC 記憶體

圖形埠

- 整合 NVIDIA GeForce6100 圖形控制器

網路

- 內建 Gigabit LAN

音效

- 內建 7.1 聲道 HD 音效

Serial ATA

- 4 個 SATA 3Gb/s 支援 SATA RAID 0、1、10、5、JBOD

擴充插槽

- 1 個 PCI-E X16 插槽
- 1 個 PCI-E X1 插槽
- 2 個 PCI 插槽

內部輸入**/**輸出接頭

- 1 個軟碟埠
- 1 個 ATA 133 IDE 接頭
- 3 個 USB 2.0 接頭
- 4 個 SATA 3Gb/s 接頭
- 1 個 FP-Audio 接頭
- 1 個 CD-In 接頭

後面板輸入**/**輸出接頭

- 1 個 PS/2 鍵盤接頭
- 1 個 PS/2 滑鼠接頭
- 1 個 COM 連接埠
- 1 個 LPT 連接埠
- 1 個 VGA 連接埠
- 4 個 USB 2.0 接頭
- 1 個 RJ-45 網路接頭
- 1 個 7.1 聲道音效接頭

RoHS

- 100%無鉛製程符合 RoHS 規範

其他

- Micro ATX 主機板規格（244mm x 220mm）
- 符合 Windows Vista 硬體需求

※ 本手冊的規格與資訊若有變動，恕不另行通知。

4.1.2 NF-M2S

處理器
- 支援具備 2000MT/s 系統匯流排的 Socket AM2 處理器
- 支援 AMD Cool ‘n’ Quiet 技術

晶片組
- NVIDIA GeForce6100 + 405

記憶體
- 2 條 240 針腳 DIMM 插槽，支援最大 2GB 記憶體容量
- 支援雙通道 DDR2 800/667/533 無緩衝 ECC/非 ECC 記憶體

圖形埠
- 整合 NVIDIA GeForce6100 圖形控制器

網路
- 內建 Gigabit LAN

音效
- 內建 7.1 聲道 HD 音效

Serial ATA
- 2 個 SATA 3Gb/s 支援 SATA RAID 0、1

擴充插槽
- 1 個 PCI-E X16 插槽
- 1 個 PCI-E X1 插槽
- 2 個 PCI 插槽

內部輸入/輸出接頭
- 1 個軟碟埠
- 1 個 ATA 133 IDE 接頭
- 2 個 USB 2.0 接頭
- 2 個 SATA 3Gb/s 接頭
- 1 個 FP-Audio 接頭
- 1 個 CD-In 接頭

後面板輸入/輸出接頭
- 1 個 PS/2 鍵盤接頭
- 1 個 PS/2 滑鼠接頭
- 1 個 COM 連接埠
- 1 個 LPT 連接埠
- 1 個 VGA 連接埠
- 4 個 USB 2.0 接頭
- 1 個 RJ-45 網路接頭
- 1 個 7.1 聲道音效接頭

RoHS
- 100%無鉛製程符合 RoHS 規範

其他
- Micro ATX 主機板規格（244mm x 220mm）
- 符合 Windows Vista 硬體需求

※　本手冊的規格與資訊若有變動，恕不另行通知。

4.1.3 NF-M2SV

處理器
- 支援具備 2000MT/s 系統匯流排的 Socket AM2 處理器
- 支援 AMD Cool ‘n’ Quiet 技術

晶片組
- NVIDIA GeForce6100 + 405

記憶體
- 2 條 240 針腳 DIMM 插槽，支援最大 2GB 記憶體容量
- 支援雙通道 DDR2 800/667/533 無緩衝 ECC/非 ECC 記憶體

圖形埠
- 整合 NVIDIA GeForce6100 圖形控制器

網路
- 內建 10/100 LAN

音效
- 內建 5.1 聲道 HD 音效

Serial ATA
- 2 個 SATA 3Gb/s 支援 SATA RAID 0、1

擴充插槽
- 1 個 PCI-E X16 插槽
- 1 個 PCI-E X1 插槽
- 2 個 PCI 插槽

內部輸入**/**輸出接頭
- 1 個軟碟埠
- 1 個 ATA 133 IDE 接頭
- 2 個 USB 2.0 接頭
- 2 個 SATA 3Gb/s 接頭
- 1 個 FP-Audio 接頭
- 1 個 CD-In 接頭

後面板輸入**/**輸出接頭
- 1 個 PS/2 鍵盤接頭
- 1 個 PS/2 滑鼠接頭
- 1 個 COM 連接埠
- 1 個 LPT 連接埠
- 1 個 VGA 連接埠
- 4 個 USB 2.0 接頭
- 1 個 RJ-45 網路接頭
- 1 個 5.1 聲道音效接頭

RoHS
- 100%無鉛製程符合 RoHS 規範

其他
- Micro ATX 主機板規格（244mm x 220mm）
- 符合 Windows Vista 硬體需求

※　本手冊的規格與資訊若有變動，恕不另行通知。

4.2 规格（简体中文）

4.2.1 NF-M2P

处理器

- 支持具备 2000MT/s 系统总线的 Socket AM2 处理器
- 支持 AMD Cool 'n' Quiet 技术

芯片组

- NVIDIA GeForce6100 + 430

内存

- 2 条 240 针脚 DIMM 插槽支持最大 2GB 内存容量
- 支持双信道 DDR2 800/667/533 无缓冲 ECC/非 ECC 内存

图形端口

- 整合 NVIDIA GeForce6100 图形控制器

网络

- 内建 Gigabit LAN

音效

- 支持 7.1 声道 HD 音效

串行 **ATA**

- 4 个 SATA 3Gb/s 支持 SATA RAID 0、1、10、5、JBOD

扩充插槽

- 1 个 PCI-E X16 插槽
- 1 个 PCI-E X1 插槽
- 2 个 PCI 插槽

内部输入**/**输出接头

- 1 个软盘端口
- 1 个 ATA 133 IDE 接头
- 3 个 USB 2.0 接头
- 4 个 SATA 3Gb/s 接头
- 1 个 FP-Audio 接头
- 1 个 CD-In 接头

后面板输入**/**输出接头

- 1 个 PS/2 键盘接头
- 1 个 PS/2 鼠标接头
- 1 个 COM 连接埠
- 1 个 LPT 连接埠
- 1 个 VGA 连接埠
- 4 个 USB 2.0 接头
- 1 个 RJ-45 网络接头
- 1 个 7.1 声道音效接头

RoHS

- 100%无铅制程符合 RoHS 规范

其它

- Micro ATX 主机板规格（244mm x 220mm）
- 符合 Windows Vista 硬件需求

※　本手册的规格与信息若有变动，恕不另行通知。

4.2.2 NF-M2S

处理器

- 支持具备 2000MT/s 系统总线的 Socket AM2 处理器
- 支持 AMD Cool 'n' Quiet 技术

芯片组

- NVIDIA GeForce6100 + 405

内存

- 2 条 240 针脚 DIMM 插槽支持最大 2GB 内存容量
- 支持双信道 DDR2 800/667/533 无缓冲 ECC/非 ECC 内存

图形端口

- 整合 NVIDIA GeForce6100 图形控制器

网络

- 内建 Gigabit LAN

音效

- 支持 7.1 声道 HD 音效

串行 **ATA**

- 2 个 SATA 3Gb/s 支持 SATA RAID 0、1

扩充插槽

- 1 个 PCI-E X16 插槽
- 1 个 PCI-E X1 插槽
- 2 个 PCI 插槽

内部输入/输出接头

- 1 个软盘端口
- 1 个 ATA 133 IDE 接头
- 2 个 USB 2.0 接头
- 2 个 SATA 3Gb/s 接头
- 1 个 FP-Audio 接头
- 1 个 CD-In 接头

后面板输入/输出接头

- 1 个 PS/2 键盘接头
- 1 个 PS/2 鼠标接头
- 1 个 COM 连接埠
- 1 个 LPT 连接埠
- 1 个 VGA 连接埠
- 4 个 USB 2.0 接头
- 1 个 RJ-45 网络接头
- 1 个 7.1 声道音效接头

RoHS

- 100%无铅制程符合 RoHS 规范

其它

- Micro ATX 主机板规格（244mm x 220mm）
- 符合 Windows Vista 硬件需求

※ 本手册的规格与信息若有变动，恕不另行通知。

4.2.3 NF-M2SV

处理器

- 支持具备 2000MT/s 系统总线的 Socket AM2 处理器
- 支持 AMD Cool ‘n’ Quiet 技术

芯片组

- NVIDIA GeForce6100 + 405

内存

- 2 条 240 针脚 DIMM 插槽支持最大 2GB 内存容量
- 支持双信道 DDR2 800/667/533 无缓冲 ECC/非 ECC 内存

图形端口

- 整合 NVIDIA GeForce6100 图形控制器

网络

- 内建 10/100 LAN

音效

- 支持 5.1 声道 HD 音效

串行 **ATA**

- 2 个 SATA 3Gb/s 支持 SATA RAID 0、1

扩充插槽

- 1 个 PCI-E X16 插槽
- 1 个 PCI-E X1 插槽
- 2 个 PCI 插槽

内部输入**/**输出接头

- 1 个软盘端口
- 1 个 ATA 133 IDE 接头
- 2 个 USB 2.0 接头
- 2 个 SATA 3Gb/s 接头
- 1 个 FP-Audio 接头
- 1 个 CD-In 接头

后面板输入**/**输出接头

- 1 个 PS/2 键盘接头
- 1 个 PS/2 鼠标接头
- 1 个 COM 连接埠
- 1 个 LPT 连接埠
- 1 个 VGA 连接埠
- 4 个 USB 2.0 接头
- 1 个 RJ-45 网络接头
- 1 个 5.1 声道音效接头

RoHS

- 100%无铅制程符合 RoHS 规范

其它

- Micro ATX 主机板规格（244mm x 220mm）
- 符合 Windows Vista 硬件需求

※　本手册的规格与信息若有变动，恕不另行通知。

4.3 Troubleshooting (How to Get Technical Support?)

4.3.1 Q & A

Q: Do I need to clear the CMOS before I use a new motherboard to assemble my new computer system?

A: Yes, we highly recommend that you clear the CMOS before installing a new motherboard. Please move the CMOS jumper from its default 1-2 position to 2-3 for a few seconds, and then back. When you boot up your system for the first time, follow the instructions in the user's manual to load the optimized defaults.

Q: If my system hangs when I update the BIOS or set the wrong CPU parameters, what should I do?

A: Whenever you update the BIOS or if the system hangs due to wrong CPU parameters setting, always clear CMOS jumper before booting up again.

Q: Why does the system fail to boot up again right after a mechanical power-off?

A: Please keep a 30-second interval between each mechanical power On/Off.

Q: Why does the system fail to boot up and nothing displays on the screen after I did some over-clocking or non-standard settings inside the BIOS?

A: It should not cause hardware or permanent damage to motherboard when BIOS settings were changed from default to over-clocking or non-standard status.

We suggest the following three troubleshooting methods to discharge CMOS data, recover the hardware default status, and then making the motherboard work again. There is no need to bother returning the motherboard to where you bought it from or go through an RMA process.

Step 1. Switch off the power supply unit and then switch it on again after one minute. If there is no power-switch on the power supply unit, disconnect its power cord for one minute and then reconnect.

Press and hold the <Insert> key on the keyboard, and press the power-on button to boot up system. If it works, release the <Insert> key and hit <Del> key to enter the BIOS setup page to apply the correct settings.

If the situation remains the same, repeat the procedures in Step 1 three times, or try Step 2.

Step 2. Switch off the power supply unit or disconnect the power cord. Open the chassis cover. Locate the CCMOS jumper near the button battery. Change the jumper position from default 1-2 to 2-3 for one minute to discharge the CMOS data, and then put it back to default 1-2 position.

Close the chassis and switch on the power supply unit or plug in the power cord. Press the power-on button to boot up system. If it works, hit <Del> key to enter the BIOS setup page to do the correct settings.

If the situation remains the same, try Step 3.

Step 3. The same procedure as Step 2, but while discharging the CMOS data, pull out the ATX power connectors from motherboard and remove the button battery during CMOS discharge.

Q: How to get a quick response for my request on technical support?

A: Please carry out a simple troubleshooting before sending "**Technical Support Form**":

System boot-up fails after the system had been assembled:

Check the motherboard's supporting specifications first to see if all the key components attached in your system can meet.

To do so, you may:

- Remove all the unnecessary add-on devices (except the CPU, VGA card, DRAM, and Power Supply), and then reboot.
- If the trouble still exists, try another VGA card of different brand/model to see if the system will start.
- If the trouble still exists, try another memory module of different brand/model.
- If the trouble still exists, try another CPU and Power Supply.

If the system runs successfully, shut it down and start re-installing the interface cards and devices that were previously installed in the system. Re-install and start the system one at a time until the system won't start.

Malfunction in the OS:

If the system hangs after resuming from S3 or some testing program, if the CPU cannot be recognized properly, if the display resolution mixed, or if a certain program cannot be executed, etc, you may:

- Upgrade the motherboard's latest BIOS version.
- Upgrade the add-on device's latest driver version.
- Check if there is any conflict in the "Control Panel/System Properties".

Q: How to fill in the "Technical Support Form"?

A: To fill in this "**Technical Support Form**", please refer to the following instructions:

- **Region:** Type in your country name.
- **E-mail:** Type in your contact E-mail information.
- **First name:** Type in your first name.
- **Last name:** Type in your last name.
- **Subject:** Type in the model name and the problem of your motherboard.
  Example 1: AA8XE and SCSI 29160 malfunction
  Example 2: AA8XE boot fails, POST code AF
  Example 3: AA8XE (system hang when S3 resume)
- **Motherboard:** Type in the model name and revision number of your motherboard.
  Example: AA8XE REV: 1.00
- **BIOS Version:** Type in the BIOS version of your motherboard. (You can find it on the screen during the POST sequence.)
- **CPU**: Type in the brand name and the speed (MHz) of your CPU. (Illustrate the over-clocking status if you had done so.)
  Example: Intel 650 3.4GHz (OC FSB=220MHz)
- **Memory brand:** Type in the brand and model name of your memory module.

Example: Memory brand: Kingston (KVR533D2N4/1G)

- **Memory size:** Type in the size of your memory module.
  Example: 512M* 4PCS
- **Memory configuration:** Type in the memory configuration in BIOS setting.
  Example: Memory Timing: 2.5-3-3-7 @533MHz
- **Graphics information:** Note Graphics card's brand, model and driver version
- **Graphics card:** Type in the brand and model name of your graphics card.
  Example: ATI RADEON X850 XT PE
- **Graphics driver version:** Type in the driver version of your graphics card
  Example: Catalyst 5.12V
- **Power supply maker:** Type in the brand and model name of your power supply unit.
- **Power supply wattage:** Type in the power wattage of your power supply unit.
- **Storage devices:** Type in the brand and specifications of your HDD drive and quantity. Specify if it was inserted on IDE (Master or Slave) or SATA ports, including the RAID allocation status.
  Example 1: WD Caviar WD600 60GB (on IDE2 master), Maxtor DiamondMax 10 SATA 300GB (on SATA 3)
  Example 2: Maxtor DiamondMax 10 SATA 300GB *2 (on SATA 3, SATA 4 RAID 1)
- **Optical devices:** Type in the brand and specifications of your optical drives and quantity. Specify if it was inserted on IDE (Master or Slave) or SATA ports.
- **Other devices:** Indicate which add-on cards or USB devices you are *absolutely sure* relate to the problem. If you cannot identify the problem's origin, indicate all the add-on cards or USB devices inserted on your system.
  Example: AHA 29160 (on PCI 2), Sandisk Cruzer mini 256MB USB Flash-disk.
- **Operating system**: Indicate which OS and language version
  Example: Microsoft Windows XP SP2, English version
  Example: Microsoft Media Center Edition 2005, Korean version
- **Problem description:** Describe the problem of your system configuration. Indicate the steps to duplicate problem if possible.
  See the blank Technical Support Form, or visit our website to fill in the form on line (http://www.abit.com.tw/page/en/contact/technical.php).

Q. Is the motherboard dead? Do I need to return it to where I bought from or go through an RMA process?

A: After you have gone through the troubleshooting procedures, yet the problem still exists, or you find an evident damage on the motherboard, please contact our RMA center. (http://www2.abit.com.tw/page/en/contact/index.php?pFUN_KEY=18000&pTITLE_IMG)

4.3.2 Technical Support Form

Region:	
E-mail:	
First name:	
Last Name:	
Subject:	
Motherboard:	
BIOS Version:	
CPU:	
Memory brand:	
Memory size:	
Memory configuration:	
Graphics card:	
Graphics driver version:	
Power supply maker:	
Power supply wattage:	
Storage devices:	
Optical devices:	
Other devices:	
Operating system:	
Problem description:	

4.4 Contact Information

Taiwan Head Office

Universal ABIT Co., Ltd.

No. 323, Yang Guang St., Neihu,
Taipei, 114, Taiwan

Tel: 886-2-8751-3380
Fax: 886-2-8751-3381

Sales: sales@abit.com.tw

Marketing: market@abit.com.tw

North America, South America

Universal ABIT (USA) Corporation

2901 Bayview Drive,
Fremont, CA 94538, U.S.A.

Tel: 1-510-623-0500
Fax: 1-510-623-1092

Website: http://www.abit-usa.com

Latin America: raymond@abit-usa.com

RMA Center: http://rma.abit-usa.com

UK, Ireland

Universal ABIT UK Co. Ltd.

Unit 3, 24-26 Boulton Road, Stevenage, Herts SG1 4QX, United Kingdom

Tel: 44-1438-228888
Fax: 44-1438-226333

For technical support and RMA return:
technical@abitcomputer.co.uk
returns@abitcomputer.co.uk

Germany and Benelux (Belgium, Netherlands, Luxembourg), France, Italy, Spain, Portugal, Greece, Denmark, Norway, Sweden, Finland, Switzerland

Universal ABIT NL B.V.

Jan van Riebeeckweg 15, 5928LG, Venlo,
The Netherlands

Tel: 31-77-3204428
Fax: 31-77-3204420

Chamber of Commerce Venlo – number 12062448

Austria, Czech, Romania, Bulgaria, Slovakia, Croatia, Bosnia, Serbia and Macedonia, Slovenia

Universal ABIT Austria Computer GmbH

Schmalbachstrasse 5, A-2201 Gerasdorf / Wien,
Austria

Tel: 43-1-7346709
Fax: 43-1-7346713

Contact: office@abit-austria.at

Website: http://www.abit-austria.at

Shanghai

Universal ABIT (Shanghai) Co. Ltd.

FL 19 Xuhui Yuan BLOG NO.1089
ZhongShan s 2 RD, ShangHai 200030
The People's Republic of China

Tel: (86-21) 54102211
Fax: (86-21) 54104791

Website: http://www.abit.com.cn

Poland

Universal ABIT Poland (Rep. office)

Strzegomska 310/2, 54-432 Wroclaw

Tel: +48-71-718-12-39
Fax: +48-71-718-12-38

Contact: Grzegorz Morgiel

Turkey

Universal ABIT Turkey (Rep. office)

Tel: 90 532 211 6860

Iran

Universal ABIT (Rep. office)

No.50, Valiasr Computer Center, Valiasr St. Tehran
Iran

Tel: 98-21-88944287
Fax: 98-21-88941655

Contact: Alireza Khoshdel

UNIVERSAL ABIT Co., Ltd.

http://www.abit.com.tw

P/N: 4310-0000-81
Rev. 2.00